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REMARKS

Paragraph 23 of the specification has been amended for clarity, no new matter has been added.

Claims 1-18 stand rejected under 35 U.S.C. 102(e) as being anticipated by Willson (US 6,063,633). Applicants assert that the claims are novel over the cited references and that the references fail to teach all of the elements of the amended claims. Specifically, Willson fails to teach the claimed step of desorbing an adsorbate while measuring the radiation emitted from the surface during the desorption.

The Official Office Action states that the claimed solids are indistinguishable from the support taught by Willson in column 2 lines 14+. Note that Willson does not teach measuring surface properties of the supports of column 2 lines 14-22, instead Willson measures catalytic activity of supports bearing catalysts, not of the support itself. There is no teaching in Willson to remove the candidate catalysts from the support and measure a surface property of the support alone, and there is no teaching in Willson of desorbing an adsorbate from solids while measuring the radiation emitted from the surface during the desorption. At most, Willson teaches observation of unmodified monolith pore wall as a control reference for optical uniformity.

Furthermore, the Official Office Action has mischaracterized applicants' statements on page 8 of their specification. The Official Office Action states that the "specification teaches in column 8 lines 26+ the claimed "adsorbate" includes other interaction where the sample is not actually absorbed." (emphasis added) The relevant portion of applicants' specification from page 8 lines 23-30 is as follows:

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"It is understood that, because of the investigative nature of the method and the variety of solids that may be under investigation, the general term "adsorbate" refers to a fluid that may be adsorbed by one or more of the solids. In fact, however, one or more of the solids in a plurality may not interact with the "adsorbate" at all, and so the term "adsorbate" as used periodically herein is meant to include fluid with the potential or possibility of being adsorbed by the solids. It is not required that the solids actually adsorb the adsorbate." (emphasis added).

As shown in the direct quote, applicants' statements on page 8 indicate that the adsorbate and one or more of the solids may not interact at all. In other words, the solid is inert to the adsorbate. Taking the underlined phrase in context with the rest of paragraph 23, applicants' specification explains that due to the investigative nature of the process and the variety of solids that may be under investigation, one of the solids in a plurality of solids may simply not interact with the selected adsorbate. The statements on page 8 are for clarification that should one solid in a set of solids turn out to be inert to the adsorbate, the claimed process would still apply to the rest of the solids having adsorbed adsorbate. The specification has been amended for greater clarity on this issue. No new matter was added by the amendment.

The Official Office Action states that the adsorbate may result in "other interactions" with the solids and therefore Willson is anticipatory. Allowing for "other interactions" is not a proper characterization of applicants' statements that some solids may not interact at all with the adsorbate. Under a proper characterization of applicants' statements in the specification and with the amendments to the specification for clarity, Willson fails to anticipate applicants' claimed invention and it is respectfully requested that the rejection be withdrawn.

In summary, Claim 1 requires desorbing adsorbed adsorbate from the solids while measuring the radiation emitted, absorbed, or altered by the

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respective solid(s) concurrently using a detector; and determining at least one surface property of the solids or mixtures of solids using the radiation measurements. Willson fails to teach or suggest the required element of desorbing an adsorbate while measuring the radiation emitted from the surface during the desorption and having failed to teach a claimed element of the invention, the *prima facie* case of anticipation must fail. Applicants' request that the rejection be withdrawn. This application is now believed to be in a condition for an allowance of all pending claims and such action is respectfully requested.

Respectfully submitted,



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